

FIG.1B

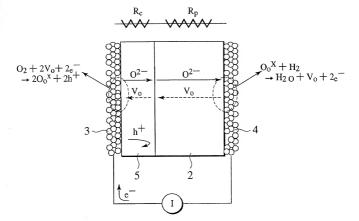
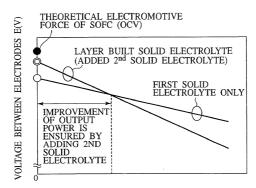
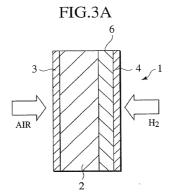
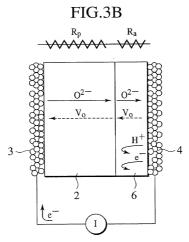


FIG.2



LOAD ELECTRIC CURRENT DENSITY OF SOFC : $J(A/cm^2)$





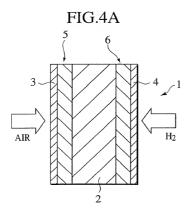
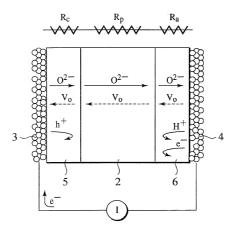


FIG.4B



09897116.070301%

No.	Layer-built solid electrolyte (2nd SE/1st SE/3rd SE)	Ion conductivity [σ]	lon transport number [Toi]
Example 1-a	YSZ / La _{0.75} Nd _{0.15} Sr _{0.1} Ga _{0.8} Mg _{0.2} O _{3-d}	0.017 S/cm	94%
Example 1-b	YSZ / Lao.8 Smo.1 Bao.1 Gao.8 Mgo.2 O3-d	0.017 S/cm	94%
Example 2-a	SDC / La _{0.75} Nd _{0.15} Sr _{0.1} Ga _{0.8} Mg _{0.2} O _{3-d}	0.018 S/cm	94%
Example 2-b	SDC / La _{0.8} Sm _{0.1} Ba _{0.1} Ga _{0.8} Mg _{0.2} O _{3-d}	0.018 S/cm	94%
Example 3-a	La _{0.75} Nd _{0.15} Sr _{0.1} Ga _{0.8} Mg _{0.2} O _{3-d} / YSZ	0.017 S/cm	%96
Example 3-b	Lao.8 Smo.1 Bao.1 Gao.8 Mgo.2 O3-d / YSZ	0.017 S/cm	%96
Example 4-a	YSZ / La0.75 Nd0.15 St0.1 Ga0.8 Mg0.2 O3-d / YSZ	0.016 S/cm	%66
Example 4-b	YSZ / La _{0.8} Sm _{0.1} Ba _{0.1} Ga _{0.8} Mg _{0.2} O _{3-d} / YSZ	0.016 S/cm	%66
Example 5-a	SDC / La _{0.75} Nd _{0.15} Sr _{0.1} Ga _{0.8} Mg _{0.2} O _{3-d} / YSZ	0.017 S/cm	%66
Example 5-b	SDC / La _{0.8} Sm _{0.1} Ba _{0.1} Ga _{0.8} Mg _{0.2} O _{3-d} / YSZ	0.017 S/cm	%66
Comparative Example a	Lao.75 Ndo.15 Sro.1 Gao.8 Mgo.2 O3-d	0.018 S/cm	91%
Comparative Example b	La _{0.8} Sm _{0.1} Ba _{0.1} Ga _{0.8} Mg _{0.2} O _{3-d}	0.018 S/cm	91%